

U.S. APPLICATION 09/850,113
AMENDMENT UNDER 37 C.F.R. § 1.111

REMARKS

Summary Of The Office Action & Formalities

Claims 1-13 are all the claims pending in the application. By this Amendment, Applicant is amending claim 11 and adding new claims 14 and 15.

The Examiner correctly acknowledges the claim to foreign priority, but indicates that the certified copy of the priority document was received in Application No. 09/019,712. In fact, the certified copy was received in Application No. 08/397,958. The Examiner is kindly requested to confirm this fact.

Applicant thanks the Examiner for initialing the references listed on form PTO 1449 submitted with the Information Disclosure Statement on May 8, 2001, thereby confirming that the Examiner has considered these references.

Regarding the requirement under 37 C.F.R. § 1.178 to surrender the original patent on which the present reissue application is based, Applicants filed an Offer To Surrender Letters Patent Under 37 C.F.R. § 1.178, offering to surrender U.S. Patent No. 5,902,965 upon the allowance of the present application.

Applicant is amending claim 11 to correct a minor, self-evident, typographical error.

Claims 1-13 are rejected under 35 U.S.C. § 102(b) as being anticipated by DD 265,229 (hereinafter “DD ‘229”). Applicant respectfully traverses.

Claim Rejection - 35 U.S.C. § 102

In rejecting claims 1-13, the Examiner states: “From the translation it appears that the DD patent allows a user to re-calculate a ratio of ingredients based on a current weight reading.” Office Action at page 2.

U.S. APPLICATION 09/850,113
AMENDMENT UNDER 37 C.F.R. § 1.111

Anticipation, under 35 U.S.C. § 102, requires the reference to “teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present.” Manual of Patent Examining Procedure (“MPEP”) § 706.02; see also MPEP § 2131. This standard has not been met in the present case, since as detailed below, DD ‘229 is deficient in teaching several limitations recited in each of independent claims 1, 2, and 10-13.

Claim 1 of the present application recites:

An electronic balance for weighing out quantities of ingredients based upon a recipe of ingredients, comprising:

.
electronic means to subtract the weight of the second ingredient called for in said recipe from the weight of the second ingredient in said weighing container

That is, the present invention, as defined above in claim 1, is directed to an electronic balance that permits an operator to compensate for an overdose of one ingredient in a recipe (i.e. the “second ingredient” of claim 1) by “[subtracting] the weight of the second ingredient called for in said recipe from the weight of the second ingredient in said weighing container.” Specifically, the electronic balance of claim 1 includes a structure (“electronic means”) that performs this subtraction.

Additionally, the electronic balance includes “means to determine the ratio of the weights of said ingredients called for in said recipe; [and] display means to show the amount of said first ingredient need to establish said ratio.” That is, the electronic balance of claim 1, which includes structure for establishing the difference between the actual weight of the second ingredient and the intended weight of the second ingredient, according to the recipe of ingredients, further includes a structure (i.e., “means” and “display means”) that determines the ratio of weights between the overdosed second ingredient and the first ingredient, and displays the amount of the

U.S. APPLICATION 09/850,113
AMENDMENT UNDER 37 C.F.R. § 1.111

first ingredient required to be added in order to maintain the proportion between the first and second ingredients defined by the recipe of these ingredients.

The foregoing features are simply not taught or suggested by DD '229. Rather, DD '229 merely discloses a balance that includes latches 10.1-10.n having memory for storing a value for the weight of each ingredient added to the scale and a corresponding display 6.1-6.n for displaying the stored value. Accordingly, zeroing the main display 8 does not zero the values in display 6.1-6.n, so that these values remain available for an operator to recall and calculate, independently of the balance, any additional amounts of the ingredients corresponding to these stored values that are required to maintain the recipe proportions. For example, if an operator adds the correct amount of a first ingredient according to a recipe for two ingredients, and then overdoses the amount of the second ingredient, the operator can¹:

- 1) recall the value for the first ingredient;
- 2) calculate, independently of the balance, the overdose amount by subtracting the recipe weight for the second ingredient from the actual dosed weight; and
- 3) calculate, independently of the balance, the required amount of the first ingredient to be added in order to maintain the recipe proportion between the first and the second ingredients.

Applicant's specification highlights this deficiency:

The balance in DD 265 229 solves the problem of overloading by means of a memory with associated assumption key, associated zeroizing key and associated tare display unit for each component of the formulation. Therefore the actual value of each component can be individually stored and displayed and as a result an overloading of a component can be rectified or corrected

¹ Applicant notes that these steps are not explicitly disclosed in DD '229, and are merely set forth here to illustrate the limited structure disclosed in this reference.

U.S. APPLICATION 09/850,113
AMENDMENT UNDER 37 C.F.R. § 1.111

by a corresponding, appropriate overloading of the other component. However, the plurality of operating keys and displays renders the balance complex i.e. difficult to read, difficult to operate and expensive to manufacture. In spite of the considerable expense such a balance is not capable of calculating the amount of material of the components to be subsequently added, which has to be done manually with external calculating aids, which readily lead to errors.

Applicant's Specification at column 1, lines 46-60.

Therefore, clearly absent from the disclosure of DD '229 is a balance having structure that "subtract[s] the weight of the second ingredient called for in said recipe from the weight of the second ingredient in said weighing container," as well as structure that calculates "the ratio of the weights of said ingredients called for in said recipe" and displays "the amount of said first ingredient need to establish said ratio." Given at least these deficiencies, the grounds of rejection of independent claim 1 are in error, and the Examiner is kindly requested to reconsider and withdraw this rejection.

Independent claim 2 of the present application recites an electronic balance for mixing a plurality of components according to a formula, comprising:

... an electronic evaluation unit, including a recalculation mode for calculation of a quantity to be added for a component in the formula based on an overfill of a quantity of another component in the formula . . .

DD '229 does not disclose a balance having any electronic structure that calculates the quantity to be added for a component in the formula based on an overfill of a quantity of another component in the formula. Again, as explained above, an operator of the DD '229 balance would need to perform this calculation manually using calculating aids that are not part of the balance.

U.S. APPLICATION 09/850,113
AMENDMENT UNDER 37 C.F.R. § 1.111

The balance recited in claim 2 further requires “a key that when operated decrements the displayed value of the quantity of the presently added component.” DD ‘229 does not teach or suggest such a key. The latches 10.1-10.n each have two keys: a re-zero key 12.1-12.n and an accept key 11.1-11.n. Neither key, when actuated, decrements the displayed value of the quantity of the presently added component. Actuation of the re-zero key 12.1-12.n deletes the memory value of the associated latch 10.1-10.n; and actuation of the accept key 11.1-11.n causes the digital value of the currently weighed ingredient to be stored in the memory for the associated latch 10.1-10.n.

Given the foregoing deficiencies, the grounds of rejection of independent claim 2 are in error, and the Examiner is kindly requested to reconsider and withdraw this rejection, as well as the rejection of claims 3-9 at least by reason of their respective dependencies.

Independent claim 10 of the present application recites:

A method of mixing a plurality of components according to a formula using an electronic balance having a surface and that displays a value of a quantity of a presently added component, comprising:

operating a key to decrement a displayed value of the quantity of the second component to the formula value for the second component; and

activating an electronic evaluation unit in the scale to calculate a value for an additional quantity of the first component required to establish an actual proportion between the first and second components the same as a proportion between the first and second components in the formula.

Independent claim 11 of the present application recites:

A method of mixing quantities of a plurality of components according to a formula using an electronic balance having a surface and that displays a value of a quantity of a presently added component, comprising:

U.S. APPLICATION 09/850,113
AMENDMENT UNDER 37 C.F.R. § 1.111

operating a key to decrement a displayed value of the quantity of the one component to the formula value for the one component; and

activating an electronic evaluation unit in the scale to calculate a value for the quantity of a further component required to establish an actual proportion of the quantities between the one component and the further component the same as a proportion between the quantities of the one component and the further component in the formula.

Clearly these steps are not taught or suggested by DD '229, given that the balance disclosed in this reference does not have a decrement key or an electronic evaluation unit that calculates a value for the quantity of the further component required to establish an actual proportion of the quantities according to a recipe. See discussion above with respect to claim 2. Accordingly, the grounds of rejection of independent claims 10 and 11 are in error, and the Examiner is kindly requested to reconsider and withdraw rejection of these claims.

Claim 12 of the present application recites:

An electronic balance for weighing out quantities of ingredients based upon a recipe of ingredients, comprising

means to determine a ratio of the weights of the ingredients called for in the recipe; and

display means to show an amount of the first ingredient needed to establish the ratio.

Again, DD '229 does not teach or suggest any structure configured to determine a ratio of the weights of the ingredients called for in the recipe nor does this reference teach or suggest a structure that shows an amount of the first ingredient needed to establish the ratio according to a recipe. See discussion above with respect to claim 1. Accordingly, the grounds of rejection of

U.S. APPLICATION 09/850,113
AMENDMENT UNDER 37 C.F.R. § 1.111

independent claim 12 are in error, and the Examiner is kindly requested to reconsider and withdraw rejection of this claim.

Finally, claim 13 of the present application recites:

An electronic balance for weighing out quantities of ingredients based upon a recipe of ingredients, comprising;

electronics that determine a ratio of the weights of the ingredients called for in the recipe; and

a display that shows an amount of the first ingredient needed to establish the ratio.

As already explained above with respect to claim 1, DD '229 does not disclose a balance having electronics that determine a ratio of the weights of the ingredients called for in a recipe, and a display that informs the operator of the additional amount of one of the ingredients needed to establish the ratio. Rather, an operator of the balance disclosed in DD '229 must rely on external calculating aids to compute the accidental overdose of one ingredient and the supplemental dosing of the remaining ingredients required to maintain the ratios defined by the recipe.

Accordingly, the grounds of rejection of independent claim 13 are in error, and the Examiner is kindly requested to reconsider and withdraw rejection of this claim.

New Claims

For additional claim coverage merited by the present invention, Applicant is adding new claims 14 and 15. These claims are believed to be allowable at least by reason of their respective dependencies. No new matter is added. In accordance with 37 C.F.R. § 1.173(c), support for claims 14 and 15 can be found at column 3, line 44 to column 4, lines 34 of the specification and the abstract.

U.S. APPLICATION 09/850,113
AMENDMENT UNDER 37 C.F.R. § 1.111

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Raja Saliba
Registration No. 43,078

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: January 17, 2003

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

Claim 11 (Amended) A method of mixing quantities of a plurality of components according to a formula using an electronic balance having a surface and that displays a value of a quantity of a presently added component, comprising:

 adding a quantity of one of the components to the surface according to a formula value for the one component; and

 when the step of adding the quantity of the one component results in an overfill of the one component, operating a key to decrement a displayed value of the quantity of the one component to the formula value for the one component; and

 activating an electronic evaluation unit in the scale to calculate a value for the quantity of [the] a further component required to establish an actual proportion of the quantities between the one component and the further component the same as a proportion between the quantities of the one component and the further component in the formula.

Claims 14 and 15 are added as new claims.